UI/UX
Tips & Tricks for developers

Ecaterina Moraru
@evauca

#LAS2020
UI Principles & Patterns

Patterns are describing recurring solutions that solve common design problems (ex. Breadcrumbs, Wizard, Undo, etc.)

Principles are fundamental rules about the practice of design (ex. Consistency, Hierarchy, Contrast, etc.)
p1# Consistency

Similar objects should have similar meanings and functions.

Allow users to recognize usage patterns, decreasing the learning curve.
1# Buttons: Primary / Secondary Actions

- Equal visual weight
- No hierarchy

Have only one primary action per screen
2# Buttons: Verbs as Actions

Avoid generic ‘OK’ or ‘Yes’
Avoid confusing phrases (like double negatives)

Use explicit verbs
Make it the obvious choice
Can take the action without reading
3# Buttons Placement: Modal Layout

- Left aligned: Vertical scanning
- Right aligned: Faster Z-shaped flow
3# Buttons Placement: Full Page Layout

![Diagram showing left and right aligned buttons]

- Left aligned
- Right aligned
4# Buttons Placement: Primary Action

- Adapt buttons position
- Primary action on outer edge

Primary
Secondary
Tertiary

Natural placement
5# Color as meaning

- Use color to differentiate button types
- Limit color selection

- Primary
- Danger
- Success
- Secondary
- Warning
- Info
- Tertiary
- Cancel
5# **Color: Destructive Actions**

Red is a strong visual cue that captures attention. Do not use regular colors, like Blue.

Always ask for Confirmation for destructive actions. Explain the consequences.
p2# Affordance

Cues which give a hint on how users may interact with an object
p2# Affordance: Links

- Non-linked content
- Hyperlinked content: Hard to recognize

Differentiate links from content:
- Link = Blue + Underline
6# Buttons vs. Links

- **Buttons:** Use for **Actions**
  - Affects the interface

- **Links:** Use for **Navigation**
  - Doesn’t affect the interface
Objects that are close together are perceived to be related.
Proximity: Menus

Use spacing to group similar items.
Similarity (Gestalt)

Objects sharing attributes are perceived to be related.

Color, size, shape or orientation can be used for contrast.
Objects connected by lines or boxes are perceived to be related.

Overrides cues from proximity or similarity.
Law of Unity: Grouping

Using lines and backgrounds to group related elements
Choice Paralysis (Hick’s Law)

The time to make a decision increases with the number and complexity of choices.

Recommended
Human brain is limited to retain $7 \pm 2$ items in the short-term memory at one time. The new estimate is $4 \pm 1$ chunks.
Serial Position Effect

We remember best the first and last items in a series.
Chunking

Group items to make them easier to process and remember
7# Form Fields

- Place label on top
- Focus state for selected field
- Highlight and explain error
- White background triggers the tendency to fill empty spaces
- Use Placeholders
- Use Masks and Limiters
- Size fields accordingly
8# Text Align: Numbers

Hard to compare values

Right-align numbers
8# Text Align: Tables

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Sept 19</td>
<td>$425.00 USD</td>
</tr>
<tr>
<td>15 Sept 19</td>
<td>$2,500.00 USD</td>
</tr>
<tr>
<td>18 Aug 19</td>
<td>$1,800.00 USD</td>
</tr>
<tr>
<td>4 Oct 19</td>
<td>$3,745.00 USD</td>
</tr>
</tbody>
</table>

Hard to scan

Choose the right alignment
Iconography is not universal

“When [Amazon] figured out customers didn’t know the magnifying glass was a standard symbol for search—some were calling it the ping-pong paddle—it added pop-up descriptions and recommendations in Hindi.”
10# Icon + Text

- New Tab
- New Incognito Tab
- Recent Tabs
- Downloads
- History

- New Tab
- New Incognito Tab
- Recent Tabs
- Downloads
- History
Want more? Learn more **principles** and **apply** them in an Open Source project of your choice.

**Refactoring UI - The Essentials**
By [Steve Schoger](https://www.linkedin.com/in/steve-schoger), [Adam Wathan](https://www.linkedin.com/in/adam-wathan/)

**Universal Principles of Design**
By [William Lidwell](https://www.linkedin.com/in/william-lidwell), [Kritina Holden](https://www.linkedin.com/in/kritina-holden/), [Jill Butler](https://www.linkedin.com/in/jill-butler/)
Thank you

Questions?